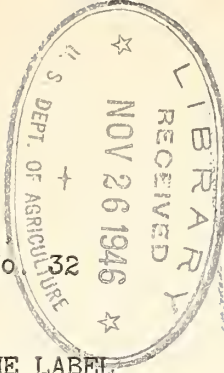


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



Excerpt from a radio talk by  
W. R. M. Wharton, chief, Eastern  
District, Food and Drug Administration,  
U. S. Department of Agriculture,  
through WJZ and associated NBC stations,  
Monday, December 15, 1930. Serial No. 32



## HOW TO READ THE LABEL

### Citrus Fruit

My read-the-label information today deals with Citrus Fruit. The most common kinds of citrus fruit in this country are oranges, lemons, grapefruit and tangerines.

Oranges and grapefruit sold in the United States are produced in California, Florida, Porto Rico, Cuba, Texas and Arizona and to a lesser extent in Louisiana. Louisiana, Mississippi, Alabama, and northwest Florida furnish a limited quantity of splendid Satsuma oranges. Texas and Arizona are producing increasing quantities of excellent grapefruit, but the principal production of citrus fruit occurs in California, Florida, Porto Rico, and Cuba, including the Isle of Pines.

California produces Navel and Valencia oranges and comparatively small quantities of grapefruit, whereas Florida, Porto Rico and Cuba produce large quantities of the principal varieties of oranges except Navels, and large quantities of grapefruit.

You should determine the characteristics of flavor and taste of the oranges and grapefruit which suit you best, then associate that with the place of origin and read labels to determine that you get what you want. Box labels practically always state the place of origin of the product.

The next thing the label readers should know is the seasons when grapefruit and oranges are available in the markets. This is important because the middle and late seasons usually furnish the highest quality of such products. Porto Rico sends its products to our markets first, beginning with oranges and grapefruit late in July or August, and the season continues until the following June. Cuba begins its shipments just a little bit later than Porto Rico and Florida comes into the market with limited quantities of oranges and grapefruit in September. The Parson Brown variety of oranges represent the early Florida shipments, followed by Pineapple oranges and other varieties. The season ends with shipments of the late variety Valencias from April to the following June. While some Florida grapefruit starts moving in September, the heavy movement is usually as follows in the order of their ripening by variety---Triumph, September to January; Silver Cluster, December to April; Marsh Seedless, February to May; McCarthy, February to June; Duncan, December to April. California begins its shipments of oranges in early November

with Navel oranges, and these are shipped from then on to June. Valencias begin to move from California in May and shipments of these continue to November so that California furnishes oranges the year round. About one-half of the California crop are Washington Navels and one-half Valencias. California grapefruit is ready in January and continues until October, but California grapefruit is seldom seen in the markets east of the Rockies. We are now storing considerable grapefruit, making it possible to buy it any time during the year.

Now, knowing the seasons for oranges and grapefruit, you can determine what varieties will be available at any particular time and the origin of the products to be found in the market. And you can check your information by reading labels for place of origin as well as statements of varieties, when made on the box labels.

Tangerines come chiefly from Florida. Practically all of these are of the Dancy variety. They appear on our markets during November, December and January. They are packed in half boxes and the tangerines vary in size from size 224s, fruit with diameter of 2-1/8 inches, to size 48s, fruit having a diameter of 3-3/4 inches.

The size of the citrus fruit you buy is important. If you ask your grocer for a dozen oranges, or a dozen of those oranges to which you point, you will have no definite idea of whether the price you are charged is the proper price to pay in relation to oranges of a larger size nor whether the price asked per dozen for any particular lot of oranges represents a better buy than a different price for another lot. Now, my friends, citrus fruit is definitely sized and is bought by your dealer by size; and the sizes are not limited to small, medium and large but, indeed, there are some 10 sizes of oranges and there are seven sizes of grapefruit. The size of Florida citrus fruit is fixed by the number which may be placed in a two compartment box which holds 1-3/5 bushels. It takes only 80 very large oranges to fill such a box whereas it takes 350 very small oranges to fill such a box. In between, there are sizes 96s, 100s, 126s, 150s, 200s, 250s, 324s, all of which mean that the number stated are required to fill a 1-3/5 bushel box. Oranges are known by size under these stated numbers. For instance, a 150-size orange is an orange of which 150 are required to fill a 1-3/5 bushel box. 150s oranges have a diameter of about three inches. An orange of a size requiring 96 to fill a box has a diameter around four inches, whereas the size requiring 324 to fill a box has a diameter of about two inches. You will find the size numbers, 96, 100, 126, 150, etc. stencilled on the end of each box of Florida oranges. Learn to know what these numbers mean, buy oranges by size and pay a relatively proper price for them. But always keep in mind that there is always some variation in size.

California oranges are labeled on the end of the boxes with the statement of the count and the diameter of the oranges. For example, the legend will read "Net count 150, average diameter three inches."



Grapefruit is packed according to size in boxes of the same dimensions as those used for oranges and these run 28, 36, 46, 54, 64, 70 and 96 to the box. Obviously the 28s are the largest size and these average six inches in diameter and the 96s are the small size. These approximate four inches in diameter. The most popular sizes are 54s, 64s, 70s. The diameter of these sizes are respectively around 4-3/4 inches, 4-1/2 inches and 4-1/4 inches, but there will always be some variation in size.

The next thing the label reader should learn about oranges and grapefruit is that these commodities are frequently sold by grade. The Bureau of Agricultural Economics of the U. S. Department of Agriculture has established three grades for citrus fruit and these are called U. S. Fancy Grade; U. S. No. 1 Grade; and U. S. No. 2 Grade. All fruit not so classified is called "Unclassified." The specifications for these grades as applied to grapefruit and oranges and as applied to the products of California, Florida, Texas and Arizona, etc., differ in minor details, but, for the purposes of this discussion, the definitions specified for Florida's citrus fruit will be used.

U. S. FANCY GRADE is citrus fruits of similar varietal characteristics which are mature, well-colored, firm, well-formed, smooth, thin skinned, free from decay, bruises, buck skin, creasing, scab, ammoniation, spray-burn, cuts which are not healed; free from injury by black or unsightly discoloration, scars, scale, thorns or green spots and free from damage caused by dirt or other foreign materials, free from damage caused by sprouting seeds, dryness, limb rubs, disease, insects, or mechanical or other means and not more than 20% of the surface of each fruit may show light discoloration.

U. S. NO. 1 GRADE differs from U. S. Fancy Grade in that citrus fruit of this grade is required to be only fairly well-colored instead of well-colored, and only fairly thin-skinned instead of thin-skinned. U. S. No. 1 citrus fruit does not have to be entirely free from ammoniation but only from damage that materially affects the appearance caused by ammoniation. U. S. Grade No. 1 fruit likewise may be affected with injury caused by scab, scars, scale, thorn scratches, green spots, dirt or other foreign materials, sprouting, dryness, limb rubs, disease, insects or mechanical or other means, but must not be affected in such a manner as to damage it. Damage in this sense means injury which materially affects the appearance or the edible or shipping quality of the fruit, whereas injury means any blemish which more than slightly affects the appearance, edibility, or shipping quality of the fruit. In U. S. Grade No. 1, not more than 75% of the surface of each fruit may show light discoloration, except when designated U. S. Grade No. 1 Russet.

U. S. Grade No. 2 citrus fruit is required to consist of citrus fruit of similar varietal characteristics which are mature and which may be only slightly colored. The fruit in this grade needs to be only fairly firm. It may be slightly misshapen and slightly rough but must be free from decay, bruises, and cuts which are not healed, and from serious damage

by black or unsightly discoloration. The fruit must not be affected with serious damage from other causes and this means injuries which seriously affect the appearance, or the edible or shipping qualities of the fruit. It may be thick-skinned. Citrus fruit falls into two color classifications called Brights and Russets and definite color specifications are laid down so as to differentiate Brights from Russets. Nothing but Brights are allowed in the Fancy Grade.

The citrus fruit you buy, especially if it is Florida fruit, has in all likelihood been sold by grade through all channels of trade right down to your grocer. Do you buy by grade or do you take what your grocer gives you and pay without exercising any choice or discrimination whatever?

Why not make an effort to become familiar with the grade characteristics of fruit? Why not make inquiries of your grocer to determine what grade of fruit he is selling you, whether it is "Fancy," "No. 1 Grade" or "No. 2 Grade" and then determine for yourselves whether you are getting what you want and whether you are paying the proper price for the grade you receive? For the same size, U. S. Fancy Grade oranges, for example, may sell for from 3 to 5 cents per dozen more than U. S. Grade No. 1. U. S. Grade No. 1 may sell for from 3 to 5 cents per dozen more than U. S. Grade No. 2. The difference between the Fancy and No. 2 Grade may be from 6 to 10 cents per dozen. Other factors may influence the price, however. California fruit is seldom sold according to U. S. Grades. The prevailing commercial grade designations for California citrus fruit are "Extra Fancy" and "Fancy" and "Choice." Extra Fancy is the best grade; choice is the poorest grade.

Wrappers on citrus fruit give you little worthwhile information. You will have to read labels on boxes to secure the information you need in your marketing. And you will have to get information from questions asked of your dealer and from observations which you make yourselves.